UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,870	10/10/2001	Ching-Yuan Wei	320528221US	5585
25096 PERKINS COI	7590 01/23/200 E LLP	EXAMINER		
PATENT-SEA	,	FLETCHER, JAMES A		
P.O. BOX 1247 SEATTLE, WA		ART UNIT	PAPER NUMBER	
,			2621	
			MAIL DATE	DELIVERY MODE
			01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Applicat	ion No.	Applicant(s)		
Office Action Summary			370	WEI, CHING-YUA	N	
			er	Art Unit		
		JAMES /	A. FLETCHER	2621		
The MAILING Period for Reply	DATE of this commun	ication appears on th	ne cover sheet with the	correspondence ad	dress	
WHICHEVER IS LC  - Extensions of time may b after SIX (6) MONTHS frc  - If NO period for reply is s  - Failure to reply within the Any reply received by the	ATUTORY PERIOD F NGER, FROM THE Me e available under the provisions on the mailing date of this commo becified above, the maximum st set or extended period for reply Office later than three months a ment. See 37 CFR 1.704(b).	IAILING DATE OF T of 37 CFR 1.136(a). In no e nunication. atutory period will apply and will, by statute, cause the ap	THIS COMMUNICATION  EVENT, however, may a reply be will expire SIX (6) MONTHS from polication to become ABANDOI	ON. timely filed om the mailing date of this co NED (35 U.S.C. § 133).		
Status						
2a)⊠ This action is 3)⊡ Since this app	o communication(s) file FINAL.  Dication is in condition  ordance with the practi	2b)∏ This action is for allowance excep	non-final. et for formal matters, p		e merits is	
Disposition of Claims						
4a) Of the abo 5) ☐ Claim(s) 6) ☑ Claim(s) <u>18-2</u> 7) ☐ Claim(s) 8) ☐ Claim(s)	0,22-37,39 and 41-45 ve claim(s) is/a _ is/are allowed. 0, 22-37, 39 and 41-45 _ is/are objected to are subject to restric	re withdrawn from c	onsideration.			
Application Papers						
10) The drawing(s  Applicant may in the Replacement described in the Repla	on is objected to by th ) filed on is/are: not request that any obje rawing sheet(s) including cclaration is objected to	a) accepted or bection to the drawing(s) the correction is requ	be held in abeyance. Sired if the drawing(s) is contact the drawing(s) is contact the second	See 37 CFR 1.85(a). Objected to. See 37 CF	, ,	
Priority under 35 U.S.0	C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
	s Patent Drawing Review (F Statement(s) (PTO/SB/08)	PTO-948)	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:			

Art Unit: 2621

## **DETAILED ACTION**

## Claim Objections

1. Claim 32 is objected to because of the following informalities: The claim recites "comprising a digital video and audio decompressing card." The Examiner believes the claim should read –comprising a *digital* video and audio card-- Appropriate correction is required.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 18-20, 22, 26, 27, 32, 39 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayakawa et al (6,445,654).

**Regarding claim 18**, Hayakawa et al disclose an optical media device, comprising:

- an optical drive configured to receive an optical storage disk containing audio and/or video data stored on the optical storage disk (Col 2, lines 63-64 "DVD video player"), wherein the optical drive includes a signal output port (Col 3, line 9 "270 a video output terminal");
- a memory card slot configured to receive a memory card (Col 3, lines 60-65
   "The flash memory 120 can be implemented by using a...detachable memory, for example, a flash memory included in an IC card connected to the DVD

Application/Control Number: 09/972,870

Art Unit: 2621

video player with the built-in CD-R drive") containing compressed audio and/or compressed video data stored on the memory card (Col 4, lines 11-16 "the input to the switch 320 is switched into the input from the flash memory 120, and the audio information reproduced from the flash memory 120 is outputted. The MPEG audio decoder 330 expands the audio information inputted from the switch 320, namely, the audio information reproduced from the flash memory 120 for output");

Page 3

a digital video and audio decompressing card coupled to the memory card slot and the optical drive through a data bus (Fig. 1, showing MPEG2 decoder 240 coupled to DVD-ROM drive 150 and Flash memory 120 through system bus 130), wherein the decompressing card is configured for [a] processing the compressed audio and/or video data stored on the memory card (Col 4, lines 11-16 "the input to the switch 320 is switched into the input from the flash memory 120, and the audio information reproduced from the flash memory 120 is outputted. The MPEG audio decoder 330 expands the audio information inputted from the switch 320, namely, the audio information reproduced from the flash memory 120 for output"), and [b] processing the audio and/or video data stored on the optical storage disk (Col 4, lines 22-30 "the microcomputer 100 shown in FIG. 1 controls the switch 320 to select and switch the input from the CD-R drive 170 for output, when detecting that the seek operation to the optical disk 180 is finished and the disk check is completed. As the reproduction from the optical disk 180 begins, when the

Application/Control Number: 09/972,870

Art Unit: 2621

Page 4

audio information read from the optical disk 180 is compressed in accordance with the format MP3, for example, the MPEG audio decoder 330 expands the audio information and outputs the result"); and

 wherein the decompressing card is configured to transmit processed audio and/or video data from the memory card via the data bus through the output port on the optical drive to an audio and/or video output device (Fig. 1, showing MPEG2 decoder 240 coupled to DVD-ROM drive 150 and Flash memory 120 through system bus 130).

Regarding claim 19, Hayakawa et al disclose an optical media device wherein the digital video and audio decompressing card includes a digital video and audio decompressing chip and a memory (Fig. 1, item 240 "MPEG2 decoder").

Regarding claim 20, Hayakawa et al disclose an optical media device wherein the digital video and audio compressing chip supports decompressing processes of MPEG layer 2 and/or layer 3 (Fig. 1, item 240 "MPEG2 decoder").

Regarding claim 22, Hayakawa et al disclose an optical media device wherein the optical media device is a DVD device (Fig. 1, item 150 "DVD-ROM drive").

Regarding claim 26, Hayakawa et al disclose an optical media device comprising a memory including a built-in program configured to identify a file format of the audio and/or video data stored on the memory card (Col 3, lines 26-33 "As the reproduction from the optical disk 180 begins, when the audio information read from the optical disk 180 is compressed in accordance with the format MP3, for example, the MPEG audio decoder 330 expands the audio information and outputs the result. On the

Art Unit: 2621

other hand, when the audio information is not compressed, the MPEG audio decoder 330 detects it and outputs the audio information as it is").

Regarding claims 27 and 32, Hayakawa et al disclose a method and an optical media device comprising:

- determining a file format for compressed video data and/or compressed audio data stored on a memory card (Col 4, lines 11-13 "the input to the switch 320 is switched into the input from the flash memory 120, and the audio information reproduced from the flash memory 120 is outputted" and Col 4, lines 31-33 "when the audio information is not compressed, the MPEG audio decoder 330 detects it and outputs the audio information as it is");
- reading the compressed data from the memory card (Col 4, lines 11-13 "the input to the switch 320 is switched into the input from the flash memory 120, and the audio information reproduced from the flash memory 120 is outputted");
- decompressing the compressed data (Col 4, lines 15-17 "The MPEG audio decoder 330 expands the audio information inputted from the switch 320, namely, the audio information reproduced from the flash memory 120 for output"); and
- outputting the decompressed data from an output port of an optical media device directly to a video and/or audio output device (Col 2, lines 1-4 "an information signal selection unit that switches a first compressed information read from the first record medium and a second compressed information read

Application/Control Number: 09/972,870

Art Unit: 2621

from the second record medium for output"), wherein determining a file format, reading the compressed data, and decompressing the compressed data are performed by the optical media device (Col 3, lines 10-12 "In the DVD video player with the build-in CD-R drive, the microcomputer 100 controls the aforementioned constituent units" and Col 2, lines 4-7 " an information expansion unit that expands a compressed information inputted from the information signal selection unit to output a digital information"), and

Page 6

wherein outputting the decompressed data includes transmitting the
decompressed data from the memory card via a data bus on the optical
media device through the output port (Fig. 1, showing MPEG2 decoder 240
coupled to DVD-ROM drive 150 and Flash memory 120 through system bus
130).

Regarding claim 39, Hayakawa et al disclose an optical media device wherein the compressed digital data includes video and/or audio data (Col 4, lines 15-17 "The MPEG audio decoder 330 expands the audio information inputted from the switch 320, namely, the audio information reproduced from the flash memory 120 for output").

**Regarding claim 41**, Hayakawa et al disclose an optical media device, comprising:

 means for reading compressed digital data from a memory card, wherein the compressed digital data includes compressed digital image and/or compressed audio data (Fig. 1, item 240 "MPEG2 decoder");

Art Unit: 2621

means for determining a file format for the compressed digital data stored on
the memory card (Col 4, lines 11-13 "the input to the switch 320 is switched
into the input from the flash memory 120, and the audio information
reproduced from the flash memory 120 is outputted" and Col 4, lines 31-33
"when the audio information is not compressed, the MPEG audio decoder 330
detects it and outputs the audio information as it is");

- means for decompressing the compressed digital data (Fig. 1, item 240
   "MPEG2 decoder"); and
- means for outputting the decompressed digital data from an output port carried by the optical media device directly to an output device (Col 3, line 9, "270 a video output terminal");
- wherein the means for determining a file format, the means for reading the
  compressed digital data, the means for decompressing the compressed
  digital data, and the means for outputting the decompressed digital data are
  included in the optical media device (Fig. 1, items 150 "DVD-ROM drive, item
  240 "MPEG2 Decoder" and Col 3, line 9, "270 a video output terminal"); and
- wherein the means for outputting the decompressed digital data is configured
  to transmit the decompressed digital data from the memory card via a data
  bus on the optical media device through the output port (Fig. 1, showing
  MPEG2 decoder 240 coupled to DVD-ROM drive 150 and Flash memory 120
  through system bus 130).

Claim Rejections - 35 USC § 103

Art Unit: 2621

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 28, 29, 33, 34, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa et al.

Regarding claim 28, 33 and 42, Hayakawa et al disclose a method and an optical media device wherein the optical media device includes a digital video and audio decompressing card carried by the optical media device (Fig. 1, item 240 "MPEG2 decoder), but are silent regarding decompression through a program on the decompressing chip.

The Examiner takes official notice that decompressing devices are notoriously well known to operate as program executing devices, which provide a low cost and high versatility compared to other methods such as hardware decoding, and would therefore be an obvious modification to Hayakawa et al by one of ordinary skill at the time of the invention.

Regarding claim 29, 34 and 43, Hayakawa et al disclose a method and an optical media device wherein the file format includes multiple formats, but only specifically mentions MPEG2 and MP3.

The Examiner takes official notice that JPEG, PSD, Amiga IFF, BMP, GIF, EPS, PCX, and TIFF are notoriously well known audio and video file formats, which provide the author and user with known ways to distribute such materials, and it would therefore

Art Unit: 2621

be an obvious modification to Hayakawa et al to include the mentioned file formats by one of ordinary skill in the art at the time of the invention.

6. Claims 23, 30, 35 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa et al (6,445,654) as applied to claims above, in further view of Beckert et al (6,202,008).

Regarding claim 23, Hayakawa et al disclose an optical media device wherein the memory card is a flash memory (Col 3, lines 60-65 "The flash memory 120 can be implemented by using a...detachable memory, for example, a flash memory included in an IC card connected to the DVD video player with the built-in CD-R drive"), but do not explicitly disclose that memory as being a compact flash memory. Hayakawa et al also disclose the use of compact flash memory, but not explicitly as a second memory storage device to an optical disc (Col 10, lines 34-37 "The hard disk 600 is a very small type, such as one conforming to the standard of the PC card or the compact flash, and is assumed to be a hard disk detachable from the main frame"), suggesting that such a removable memory could provide the A/V storage provided by the previously disclosed flash memory.

Beckert et al teach the use of compact flash memory as a removable storage medium for A/V data (Col 6, line 67 – Col 7, line 3 "These applications can also be stored on the hard disk drive 132 or on a removable storage medium, such as a CD ROM, cassette, PC-Card Flash memory, PC-Card hard disk drive, or floppy diskette"), providing the user with a known means of storing and reproducing data.

As suggested by Hayakawa et al and taught by Beckert, the use of compact flash memory is well known, and provide the user with a known means of storing and reproducing data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hayakawa et al in order to specify the flash memory as being a compact flash memory.

Regarding claims 30, 35 and 44, Hayakawa et al disclose a method wherein reading the compressed digital data from a card carried by the optical media device (Fig. 1, item 24 "MPEG2 decoder" and item 120 "flash memory"), but does not explicitly disclose the source of that data being a PCMCIA format memory card.

Beckert et al teach the reading of digital data from a PCMCIA format memory card (Col 4, lines 4-6 "dual PCMCIA card sockets 44 which accept PCMCIA card types I, II and III").

As taught by Beckert et al, PCMCIA cards are well known carriers of digital data, providing the author and the user with a known and convenient means of transporting and reproducing digital data.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Hayakawa et al in order to include a PCMCIA format for the flash memory card.

7. Claims 24, 25, 37, 31, 36, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa et al as applied to claim 23 above, and further in view of Jones et al (6,438,638).

**Regarding claim 24**, Hayakawa et al are silent regarding the use of adapter cards for various form factors of memory cards.

Jones et al teach an apparatus for broadcasting digital video and audio signals wherein the device further includes a second memory card of a different form factor than the first memory card (Fig. 3A, items 24 "Smart Media", 28 "SD, and 18 "Mem Stick"), and wherein the memory card slot includes an adapter for receiving the second memory card (Fig. 3A items 30 "SM-TO-CF", 32 "MMC/SD TO CF", and 34 'MEM STK-TO-CF").

As taught by Jones et al, adapters for various form factors of memory cards are well known, providing the user with a choice of preferred hardware compatible with his other equipment.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Beckert et al in order to include an adapter to accommodate various memory modules with different form factors.

**Regarding claim 25**, Hayakawa et al are silent regarding the specific forms of the memory card.

Jones et al teach an apparatus for broadcasting digital video and audio signals, wherein one of the memory card formats is a secure digital card (Col 2, lines 59-60 "CF-to-PCMCIA adapter 10 is a passive adapter that contains an opening that receives CompactFlash card 16").

As taught by Jones et al, secure digital cards are well known, commercially available, and widely used means of storing data in a medium that prevents disclosure

to unauthorized persons and inadvertent erasure, while still providing a compact, portable medium.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al in order to provide a means of connection to a secure digital card.

Regarding claims 31, 36 and 45, Hayakawa et al disclose a method and optical media device wherein reading the compressed data includes reading compressed data from a memory card positioned in a memory card slot in the optical media device as analyzed and discussed above, but are silent regarding the memory card being inserted into an adapter.

Jones et al teach an apparatus for reading compressed digital image files through an adapter inserted into a PCMCIA socket (Col 1, lines 55-64).

As taught by Jones, adapters for memory cards are well known, widely used, and commercially available means for allowing a user to read data from a card that is not directly compatible with his reader, providing him with a low cost and simple means of reading data that would otherwise be unavailable to him.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert in order to include an adapter to the PCMCIA card reader.

Regarding claim 37, Hayakawa et al disclose a method and an optical media device wherein the file format includes multiple formats, but only specifically mentions MPEG2 and MP3.

Art Unit: 2621

The Examiner takes official notice that JPEG, PSD, Amiga IFF, BMP, GIF, EPS, PCX, and TIFF are notoriously well known audio and video file formats, which provide the author and user with known ways to distribute such materials, and it would therefore be an obvious modification to Hayakawa et al to include the mentioned file formats by one of ordinary skill in the art at the time of the invention.

## Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. FLETCHER whose telephone number is (571)272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF 9 January 2008

/Thai Tran/ Supervisory Patent Examiner, Art Unit 2621